### Todd Adams

#### Associate Professor

Department of Physics

Florida State University Work: (850) 644-7159 Tallahassee, FL 32306 Fax: (850) 644-6735

Email: tadams@hep.fsu.edu

World Wide Web: http://www.hep.fsu.edu/~tadams

# **Professional Employment**

• Associate Professor, Florida State University, 2008-present.

- Assistant Professor, Florida State University, 2001-2008.
- Research Associate, Kansas State University, 1997-2001.

#### **Education**

- Ph.D. in Particle Physics, May, 1997, University of Notre Dame.
- M.S. Physics, May, 1994. University of Notre Dame.
- B.S. Physics, Computer Science minor, May, 1991. Hope College, Holland, MI.

#### Honors, Awards, Grants

- Co-Principal Investigator DOE Grant "High Energy Physics" grant (2002 present)
- FNAL/URA Visiting Scholar Award (2009-2010)
- FSU Council on Research and Creativity Planning Grant (2003-2004)
- FSU First Year Assistant Professor Award (2002)
- Sigma Pi (induction, 1990)

## Recent Courses Taught at FSU

- AST 1002 Planets, Stars and Galaxies, lecture/online hybrid course, Fall 2007–2009.
- AST 1002 Planets, Stars and Galaxies, Spring 2007.
- AST 1002 (Honors) Planets, Stars and Galaxies, Fall, 2004-Fall, 2006.

### Research Experience

- CERN LHC CMS Experiment, (2006 present).
- FNAL DØ Experiment, (2001 present).
- NuSOnG Collaboration, (2008 present)
- FNAL Experiment 815 (NuTeV), (1997 2001).
- NLC R&D, (1999 2000).
- BNL Experiment 852, (1991 1997).
- Atomic Collision Lab, Hope College, (1988-1991).

#### Recent DØ Activities

- New Phenomena physics group co-convener (2007-present)
- Computing Planning Board member (2007-present)
- Simulation group co-convener (2006-2007)
- Monte Carlo Request Coordinator (2005-2007)
- $t\bar{t}$  cross-section and charged Higgs search in the  $e/\mu + \tau$  final states (2006-present)
- Search for neutral, long-lived particles at DØ published in PRL (2003-2006)
- Run 2b L1Cal trigger upgrade (2002-present)

#### Recent CMS Activities

- ECAL Software and Operations (2009-present)
- Search for heavy, stable, charged particles (2008-present)
- L3 GEN-SIM Task Level 3 task responsible for issues that bridge MC generators, detector simulation, and analysis (2007-present)

### Recent Conference Presentations

- 1. DPF 2009, Detroit, Michigan, July 2009.
- 2. Hadron Collider Physics, Galena, Illinois, May 2008.
- 3. Rencontres de Moriond: Electroweak Interactions, La Thuile, Italy, March 2007.
- 4. American Physical Society April 2007 Meeting, Jacksonville, FL, April 2007.
- 5. Joint Meeting of Pacific Region Particle Physics Communities, Honolulu, HI, October 2006.
- 6. The 13th International Conference on Supersymmetry and Unification of Fundamental Interactions (SUSY05), Durham, England, July 2005.

#### **Selected Refereed Publications**

- 1. V. M. Abazov *et al.* [DØ Collaboration], "Measurement of the  $t\bar{t}$  Production Cross Section and Top Quark Mass Extraction Using Dilepton Events in  $p\bar{p}$  Collisions," accepted by Phys. Lett. B, arXiv:0901.2137 [hep-ex].
- 2. T. Adams *et al.* [NuSOnG Collaboration], "Terascale Physics Opportunities at a High Statistics, High Energy Neutrino Scattering Experiment: NuSOnG," Int. J. Mod. Phys. A **24**, 671 (2009).
- 3. T. Adams, "Searches for Long-lived Particles at the Tevatron Collider," Mod. Phys. Lett. A 23, 371 (2008).
- 4. M. Abolins *et al.*, "Design and Implementation of the New D0 Level-1 Calorimeter Trigger," Nucl. Instrum. Meth. A **584**, 75 (2008).
- 5. V. M. Abazov *et al.* [DØ Collaboration], "Search for Neutral Long-Lived Particles Decaying into Two Muons in  $p\bar{p}$  Collisions at  $\sqrt{s} = 1.96$  TeV," Phys. Rev. Lett. **97**, 161802 (2006).
- 6. T. Adams *et al.*, "Observation of an Anomalous Number of Dimuon Events in a High Energy Neutrino Beam," Phys. Rev. Lett. **87**, 041801 (2001).
- 7. T. Adams et al., "Evidence for Diffractive Charm Production in  $\nu_{\mu}Fe$  and  $\bar{\nu}_{\mu}Fe$  Scattering at the Tevatron," Phys. Rev. D, 092001 (2000).